

CENTRAL FAX UNIT  
NOV 14 2005

### Remarks

Claims 1-20 remain pending. Claim 1 has been amended. Applicant respectfully requests reconsideration of the pending claims in view of the comments below.

### *Objections to the Specification*

The disclosure was objected to because of the following informalities: ©) on page 11, paragraph 43 and page 12, paragraph 45. These have been corrected to replace ©) by (C).

All use of trademarks in the disclosure have been checked and those marks with a missing ® symbol (in paragraphs 1,5, 28 and 30) have been edited to add the symbol, and followed by a noun.

### *Claim Rejection - Claims 1, 2, 6 and 7*

Claims 1, 2, 6 and 7 were rejected under 35 U.S.C. 102(b) as anticipated by Carter et al. (U.S. 6,205,360).

In response, Claim 1 has been amended to recite: "wherein the fitting method builds an M iso-loudness contour and determines a T iso-loudness contour".

Carter teaches that its "invention comprises an auditory prosthesis adapted to automatically derive threshold and maximum comfortable stimulation levels so as to determine dynamic range for electrical stimuli..." [Carter, column 3, lines 47-50].

C level contours, as referred to in Carter, do not correspond to M iso-loudness contours referred to in Applicant's amended Claim 1. A comfort C level is defined "as the maximum amount of electrical stimulation which can be applied before the patient reports discomfort" [See, Carter, column 1, lines 30-34]. Hence, a C level contour is not based on stimulation at each channel that provides the *same level of perceived loudness (or iso-loudness)* but, instead, is based on stimulation at each channel that is at a *just-below-an-intolerable level of pain or discomfort*. An iso-loudness contour based on a *same level* perceived loudness and a C level contour based on a *just-below-an-intolerable-level of pain or discomfort* are not the same contours.

Because Claim 1, as now amended, recites building an M iso-loudness contour, which element is not taught by Carter, Claim 1 is not anticipated by Carter. Furthermore, claims 2, 6 and 7 by virtue of their dependencies to Claim 1, for at least that reason, are also not anticipated.

*Claim Rejection - 10-15, 18*

Claims 10-15 and 18 were rejected under 35 U.S.C. 102(b) as anticipated by Carter et al., or in the alternative, rejected under 35 U.S.C. 103(a) as obvious over Carter et al. in view of McDermott et al (U.S. 5,597,380). Both rejections are respectfully traversed.

Carter does not anticipate Applicant's Claim 10 because Carter is missing at least one element recited in Claim 10. Applicant's Claim 10 recites "linearly transposing the iso-neural contour to set an iso-loudness contour". Applicant's Claim 10 recites that after determining an iso-neural contour, that an iso-loudness contour is obtained by linear transposition of the iso-neural contour. Carter, in contrast, does not teach linear transposition to find an iso-loudness contour but, instead, teaches finding a C level contour. As discussed, a C level contour is not the same as an M *iso-loudness* (same perceived loudness) contour. Moreover, rather than a simple, linear transposition, Carter teaches an elaborate method of determining each C level data point, for each channel [Carter, columns 9 and 10]. Because Carter is missing the element of linear transposition of one contour to another contour, it cannot anticipate Applicant's Claim 10.

With respect to the obviousness rejection of Claim 10, based on Carter in view of McDermott, there is no motivation or suggestion to combine Carter with McDermott because Carter does not teach or mention an iso-neural contour that can be linearly transposed to an iso-loudness contour. Indeed, Carter teaches away by teaching obtaining C-level contours, which are not the same as an iso-loudness contour. As such, Claim 10 is not made obvious by Carter in view of McDermott.

Carter does not anticipate Applicant's Claim 15 because Carter is missing the element "linearly transposing the first iso-loudness contour to set a second iso-loudness contour." Moreover, there is no motivation or suggestion to combine Carter with McDermott to yield Applicant's Claim 15, because Carter teaches obtaining T level contour and then a C level

contour, where individual C level datapoints at each channel are obtained, but not by linear transposition. Therefore, Claim 15 is not made obvious by Carter in view of McDermott.

Claims 11-14 and 18 are not anticipated by Carter nor made obvious by Carter in view of McDermott, at least, but not necessarily solely, because those claims depend from independent Claim 10 or Claim 15, which are not anticipated or made obvious.

*Claim Rejection - 3-5*

Claims 3-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. Because Claim 1, as now amended, is neither anticipated nor made obvious by Carter or Carter and McDermott, this rejection is mooted. Claims 3-5, are in condition for allowance based at least on their dependencies to Claim 1, although it is believed that Claims 3-5 also separately provide elements which are not anticipated or made obvious by Carter and/or McDermott.

*Claim Rejection - 16, 17, and 19-20*

Claims 16, 17 and 19-20 were rejected under 35 U.S.C. 103(a) as obvious over the modified Carter et al. This rejection is respectfully traversed.

The obviousness rejection to Claim 16 and 17 are mooted because they depend from Claim 15, which Applicant believes to be unanticipated and not obvious. Claim 16 presents, separately, an element, an M iso-loudness contour, that is never mentioned by Carter and is, indeed, not necessary to Carter's invention which measures only T and C levels. There is no motivation to modify Carter to use M iso-loudness levels when this is unnecessary to implement Carter's invention. Hence, Claims 16 and 17 are believed in condition for allowance.

Claim 19-20 were rejected for being obvious over the modified Carter. Carter is missing at least one element from Applicant's independent Claim 19. Carter does not describe or discuss the use of "pulsewidths" to obtain an iso-loudness contour at that set pulsewidth. Moreover, Carter does not mention or discuss "linearly transposing the iso-loudness contour...", thus obtained at a set pulsewidth. Because Carter does not teach the linear transposition from one iso-loudness contour to another iso-loudness contour, Carter cannot be modified to yield

Applicant's Claim 19. Claim 20 is not made obvious by the modified Carter, at least, although not necessarily solely, because of dependence on the non-obvious Claim 19.

*Claim Rejection - 8 and 9*

Claims 8 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Carter in view of McDermott. Claims 8 and 9 are in condition for allowance because they depend on Claim 1, which, as now amended, is believed to be in condition for allowance. Apart from dependency to Claim 1 as a reason, Claim 8 has virtual electrodes as an element, which element is not suggested in either Carter nor McDermott.

In view of the above discussion, Applicant courteously asks for reconsideration of Claims 1-20 and solicits a speedy notice of allowability.

**Request for One-Month Extension of Time**

A one-month extension of time is hereby requested, extending the due date of this response to November 14, 2005. The one-month extension fee is believed to be \$120. Please charge this and any other required fees to deposit account 50-0648.

Respectfully Submitted,

November 11, 2005

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Amendment A  
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